



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.



Brown Creeper, with food in its bill, backing down toward the nest, in a 'zig-zag' line, from a few inches higher up the tree-trunk, where it had been clinging motionless for several minutes.

NESTING HABITS OF THE BROWN CREEPER
AS OBSERVED IN PLYMOUTH COUNTY,
MASSACHUSETTS, WITH DESCRIPTION OF A NEST FROM
NORTH SCITUATE.¹

BY ARTHUR P. CHADBOURNE, M. D.

Plates VI-IX.

EVER since 1896, when I first spoke of the Brown Creeper (*Certhia familiaris americana*) as undoubtedly breeding in one of the white cedar swamps so common throughout Plymouth County, Mass.,² I have found these birds each summer during May or June with the single exception of 1899, when I was unable to look for them until July. My efforts to find the nest, however, were unsuccessful until May, 1900, when I discovered one at North Scituate, Mass., only a short distance from what is not inappropriately called "the shore of the swamp." The swamp in question is large and cut up into a number of narrow strips, each not unlike a yard stick in shape, and having different owners; consequently the growth varies on each strip according to the time at which the timber was last cut off. A few of the lots are still covered with old cedar; but the greater part is large second-growth, and mixed hardwood; in other cases, almost clear cedar, from fifteen to thirty-five feet in height. Scattered about in the hardwood, and, to a less extent in the cedar, are numerous white pines, hemlocks, and here and there yellow, or, as they are locally called, "swamp pines." It was on the southern edge of one of these narrow strips, which had been cut "clean" two years before, that I found the present nest. Deep mud and water had made the place almost inaccessible until last year (1899), when the water was more or less drained off by a ditch. Around this clearing the growth is chiefly cedar and hemlock, with a few old white

¹ This was written, to a large extent, in 1900. The article, by Messrs. Kennard and McKechnie which also appears in this number of 'The Auk,' covers the published accounts of the nesting of the Creeper in the southern part of its range, and I have omitted, therefore, what I had written on this subject.

² Cf. Auk, Vol. XIII, 1896, p. 346.

pinus to the south; and on the other sides more or less cedar and mixed second-growth hardwood. On the southern edge of this cleared strip was an old wind-shaken white cedar¹ which, with a few of its fellows and half a dozen hemlocks and white pines, were the sole remnants of the large old timber which had formerly covered the clearing. Beneath these old trees, and throughout the swamp was the usual undergrowth of ferns, thick sphagnum moss, mountain laural bushes, black alder, etc.; while beneath, the black mud and water was bridged by the roots, and decaying stumps of dead trees, and even in midsummer the air was damp and not unlike the mossy northern woods where the Creepers and other northern birds are habitually found in the nesting season.

The morning of May 11, 1900, the day of the so-called "May freeze," I started a Creeper from the ground under a clump of cinnamon ferns (*Osmunda cinnamomea*), where she was gathering the soft yellow down from the young fronds. The bird quickly flew to the trunk of the nest tree, hesitated a moment, then with a horizontal run sideways and most decidedly crablike, she disappeared with her load in the upper part of a rift which extended completely through the trunk of the tree for a distance of five feet or more from the base, as is clearly shown in the photograph (Plate VI). It took the Creeper a long time to arrange the down to her satisfaction, and her mate three times brought her food while she was hidden within the soft materials of the nest. In about fifteen minutes she flew out and began zigzagging up, and occasionally backed down, the trunk of a neighboring tree, looking for insects. It was fully thirty minutes before she returned to the nest, but during the latter part of the time I had lost sight of her, and when she returned it was with another load of fern-down. The crack, or rift, near the top of which the nest was placed, extended completely through the tree trunk from northeast to southwest, and at the level of the top of the nest was about eight inches in width from side to side; while the space

¹ When a swamp has been cut off the trees which border it are exposed to the northeast storms, and many of them, either blown down or partly uprooted, lean against their fellows.



FIG. 1. BROWN CREEPER. QUIETLY WAITING, AT THE SAME HEIGHT AS THE 'PEAK OF THE GABLE.'



FIG. 2. BROWN CREEPER, TAKING THE HORIZONTAL RUN SIDEWAYS, TO THE PEAK OF THE OUTER NEST-WALL.



WIND-SHAKEN NESTING-TREE AND ITS SURROUNDINGS.

between the two walls was, roughly, four inches. The framework of the nest did not extend quite to the edge of the trunk, but completely filled the center. The side walls rose in two peaks several inches above the nest proper and had a sharp pitch like an inverted V, the outside being almost vertical, though on the inside the slope down to the nest itself was less steep. The twigs and pieces of bark which formed the outside wall were laid regularly like thatch, being held in place by a few cross loops of thin cedar bark; but on the inside there seemed to be no regular arrangement. On the east there was just enough space above to allow the bird to slip in sideways between the two parts of the tree trunk and then back down into the hollow where the eggs were. This she could do without turning; but occasionally she entered through the southwest side, or gable, and there being very little space here, she usually turned somewhat before entering the cleft and came *down* the trunk, *head first, tail last*, regardless of ornithological rules, which are binding upon all woodpeckers, creepers, and the like. While thus "standing on her head," she seemed to move as surely and easily as in the more natural position.

It was several days after I saw the bird carrying nesting material before I thought it was safe for me to inspect the contents of the nest. On looking in no eggs were to be seen, only a mass of down fluffed like a feather bed, but as, on May 22, there were four open bills belonging to as many young creepers, protruding from the down, it is evident that there must have been four, perhaps five or six eggs in the set, although I cannot say that I ever had a glimpse of any of them. The young were fed by both of the birds, who, I think, seldom extended their search beyond the circle of a couple of rods in width, which included only ten trees, and I never saw them visit the piles of fallen tree trunks and unbarked logs which were scattered throughout the clearing and must have contained countless numbers of borers, judging from the amount of sawdust about, and the rasping noise of the larvæ. Both birds fed the young, and occasionally each other as well, for though it was impossible to distinguish the male from the female, yet both individuals were seen feeding and also being fed. Whether incubation was shared between the male and the female,

I cannot say with certainty; nor am I sure that the peculiar wheezy little song was made only by the male. It was so slight and feeble that it could not be heard more than a few feet away, and shows how easily the birds might be overlooked in the breeding season even when one has penetrated to their almost inaccessible haunts. The clump of a dozen or more old trees above referred to, evidently contained an abundant supply of food for both old and young, and during one whole afternoon neither bird left these few old trees, nor was more than three or four minutes' search ever necessary in order to find a suitable morsel for the young. Considerable time was spent by one or both birds hanging motionless to the trunk of some large tree, and not even the familiar *screeep* was heard, the birds being perfectly silent. When coming from the nest the bird usually carried a bit of excrement and dropped it a short distance away.

Unfortunately, I was unable to visit the nest between June 4 and June 6, and on the latter date the nest was empty and no trace of old or young could be found. On July 15, Creepers were again seen near the nesting tree, but, of course, they may not have been the former occupants. I hoped the birds would return to their old home the next season and, in order to keep everything unchanged, wire guys were run from the leaning tree to brace it against the winter's storms. But since 1900 the tree has been unoccupied, nor have I seen Creepers during the breeding season in that particular part of the swamp. This may be due to the growth along the south of the nesting tree having been largely cut off for firewood, as has been the case with many of the swamp lots which in 1900, were covered with a dense growth of white cedar.

That this nest was not exceptional, and that the Brown Creeper regularly, though locally, breeds in similar situations, is shown by the fact that, in 1896, 1897, and 1898, I saw Brown Creepers in various parts of the same swamp during May or early June. In 1899, I did not look for them until late. In 1900 was found the nest mentioned above. In 1901 and 1902, I again saw Creepers both in May or the first week in June, but could not find a nest. In 1903, the greater part of the suitable old growth had been cut, and I saw no birds; while in 1904, I was not able to visit the

swamps at all. So much for my cedar swamp at North Scituate. In addition, in 1897, I saw a pair of Brown Creepers in another cedar swamp some six miles distant from the one in which the nest was found in 1900; and in 1899, about May 12, I met two pairs of Brown Creepers in what is known as "Valley Swamp," near South Weymouth. It seems to me that the right of the Brown Creeper to a place among the regular summer birds nesting locally and sparingly in favorable localities in southern Massachusetts, is sufficiently vindicated, after having been challenged and doubted for many years. The conditions which determine the distribution of the Creeper in this region, are apparently a very moist, humid atmosphere, dense evergreen growth, through which the sun penetrates with difficulty, and considerable extent of wild woodland which is not disturbed by man throughout the nesting season. That the bird is common in the breeding season I do not believe. That it is far more common than has been supposed, it seems to me is also evident. That it is and has been a regular summer resident in the cedar swamps of Massachusetts — unseen because usually inaccessible — needs little if any additional proof. Unfortunately, May and June have been with me the busiest months of the year, and I have had little opportunity to search as carefully or as often for the bird and its nest as I have desired.

THE BREEDING OF THE BROWN CREEPER IN EASTERN MASSACHUSETTS.

BY FREDERIC H. KENNARD AND FREDERIC B. McKECHNIE.

Plates X-XII.

As a first record of the breeding of the Brown Creeper (*Certhia familiaris americana*) in eastern Massachusetts we have the account of Dr. J. A. Allen in his 'Catalogue of the Birds of Springfield, Mass.'¹ in which he describes the bird as "common. Resident;

¹ Proceedings Essex Institute, Vol. IV, July, 1864, p. 69.